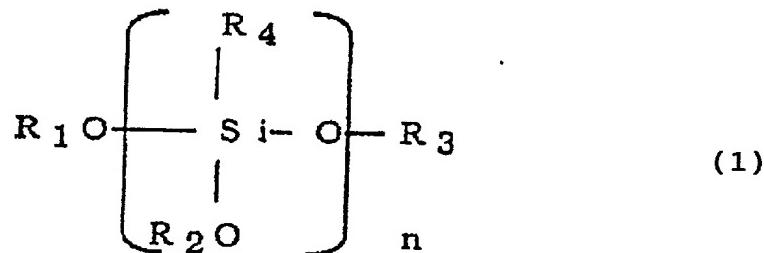


What is claimed is:

1. A coated material, characterized in that, a surface is formed where a coating solution of a silane type mainly comprising a compound represented by the formula 1 is applied to a fiber material and hardened/solidified by the action of a catalyst.



(in the formula 1,  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  may be same or different and each is hydrogen or an alkyl group having 1-4 carbon(s)).

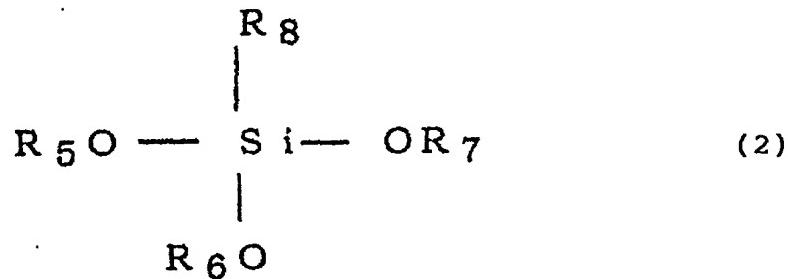
2. The coated material according to claim 1, wherein the surface is formed where, prior to the application of the coating solution, the said fiber material is dipped in alcohol and dried and ultraviolet ray is further irradiated thereto.

3. The coated material according to claim 1, wherein the surface is formed where a hydrolyzable organic metal compound is used as a catalyst for hardening/solidifying the said coating solution of a silane type.

4. The coated material according to claim 3, wherein the surface is formed where one or more organometallic compound(s) selected from a group consisting of titanium, zirconium, aluminum and tin is/are used as the said hydrolyzable

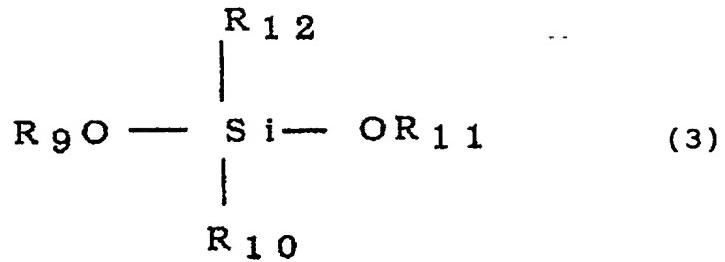
organometallic compound.

5. The coated material according to claim 1, wherein the surface is formed where, in addition to the above-mentioned main component, a coating solution containing a compound represented by the formula 2 having three hydrolyzable substituents and one unhydrolyzable substituent is used as the said coating solution of a silane type.



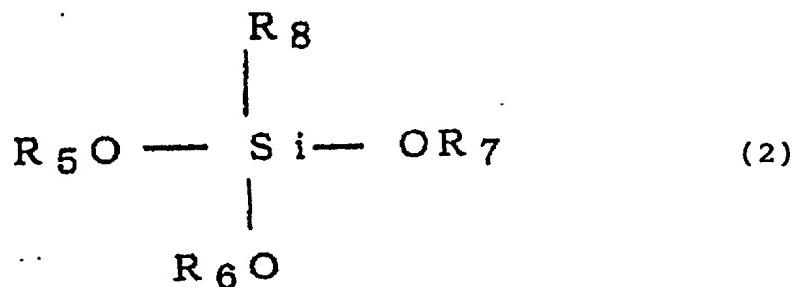
(in the formula 2, R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub> may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of R<sub>5</sub>O, R<sub>6</sub>O and R<sub>7</sub>O to Si is an oligomer comprising a siloxane bond; and R<sub>8</sub> is an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule)

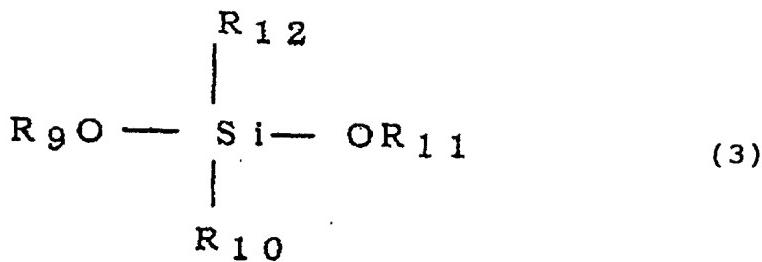
6. The coated material according to claim 1, wherein the surface is formed where, in addition to the above-mentioned main component, a coating solution containing a compound represented by the formula 3 having two hydrolyzable substituents and two unhydrolyzable substituents is used as the said coating solution of a silane type.



(in the formula 3,  $R_9$  and  $R_{11}$  may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of  $R_9O$  and  $R_{11}O$  to Si is an oligomer comprising a siloxane bond; and  $R_{10}$  and  $R_{12}$  each is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule)

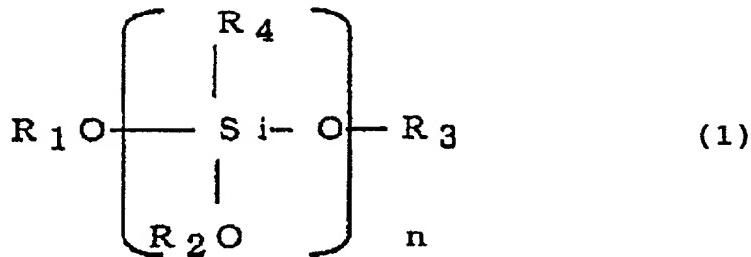
7. The coated material according to claim 1, wherein the surface is formed where, in addition to the above-mentioned main component, a coating solution containing the compound represented by the formula 2 and the compound represented by the formula 3 is used as the said coating solution of a silane type.





(in the formula 2  $\text{R}_5$ ,  $\text{R}_6$  and  $\text{R}_7$  may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of  $\text{R}_5\text{O}$ ,  $\text{R}_6\text{O}$  and  $\text{R}_7\text{O}$  to Si is an oligomer comprising a siloxane bond; and  $\text{R}_8$  is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule; and in the formula 3,  $\text{R}_9$  and  $\text{R}_{11}$  may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of  $\text{R}_9\text{O}$  and  $\text{R}_{11}\text{O}$  to Si is an oligomer comprising a siloxane bond; and  $\text{R}_{10}$  and  $\text{R}_{12}$  each is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule)

8. A coating solution of a silane type for giving an appropriate strength and good light transmitting and water repelling properties to a fiber material where the said coating solution contains the main component compound represented by the above formula 1 and a catalyst for hardening/solidifying thereof.

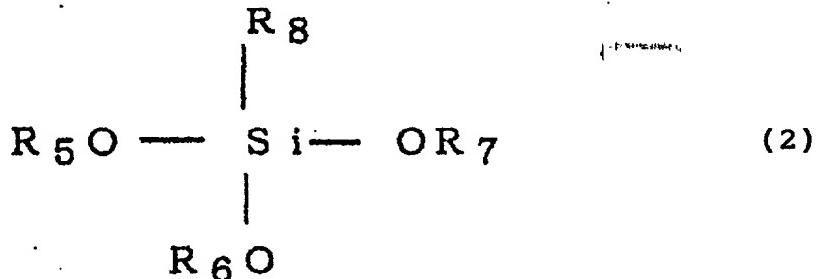


(in the formula 1,  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  may be same or different and each is hydrogen or an alkyl group having 1-4 carbon(s)).

9. The coating solution according to claim 8, wherein the catalyst for hardening/solidifying the said coating solution of a silane type is a hydrolyzable organometallic compound.

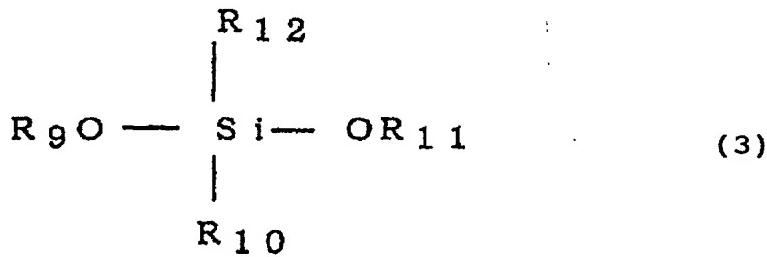
10. The coating solution according to claim 9, wherein the hydrolyzable organometallic compound is one or more organometallic compound(s) selected from a group consisting of titanium, zirconium, aluminum and tin.

11. The coating solution according to claim 8, wherein the coating solution of a silane type contains a compound represented by the formula 2 having three hydrolyzable substituents and one unhydrolyzable substituent in addition to the above main component.



(in the formula 2, R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub> may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of R<sub>5</sub>O, R<sub>6</sub>O and R<sub>7</sub>O to Si is an oligomer comprising a siloxane bond; and R<sub>8</sub> is an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule)

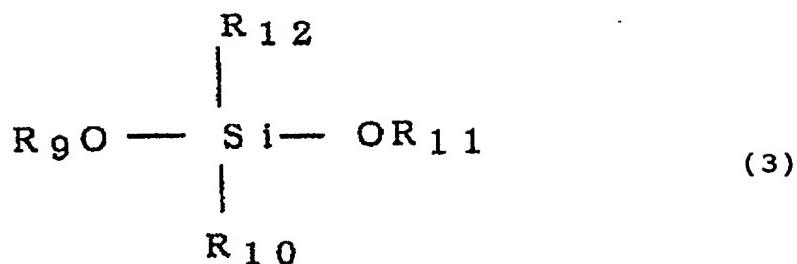
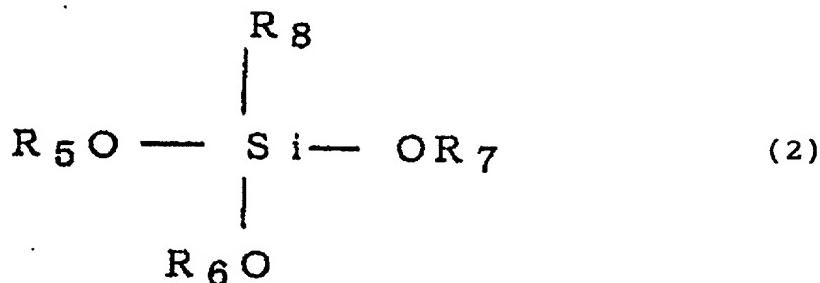
12. The coating solution according to claim 8, wherein the coating solution of a silane type contains a compound represented by the formula 3 having two hydrolyzable substituents and two unhydrolyzable substituents in addition to the above main component.



(in the formula 3, R<sub>9</sub> and R<sub>11</sub> may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of R<sub>9</sub>O and R<sub>11</sub>O to Si is an oligomer comprising a siloxane bond; and R<sub>10</sub> and R<sub>12</sub> each is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule)

13. The coating solution according to claim 8, wherein the coating solution of a silane type contains the compound represented by the formula 2 and the compound represented by

the formula 3 in addition to the above main component.



(in the formula 2  $R_5$ ,  $R_6$  and  $R_7$  may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of  $R_5O$ ,  $R_6O$  and  $R_7O$  to Si is an oligomer comprising a siloxane bond; and  $R_8$  is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule; and in the formula 3,  $R_9$  and  $R_{11}$  may be same or different and each is a monomer comprising hydrogen, an alkyl group or an alkenyl group; a bond of  $R_9O$  and  $R_{11}O$  to Si is an oligomer comprising a siloxane bond; and  $R_{10}$  and  $R_{12}$  each is an alkyl group, an alkenyl group or a phenyl group which may contain an epoxy group or a glycidyl group in a molecule)